Concept Development on the Pinnacle Pathway

Concept Development

Joint Concept Development and Experimentation

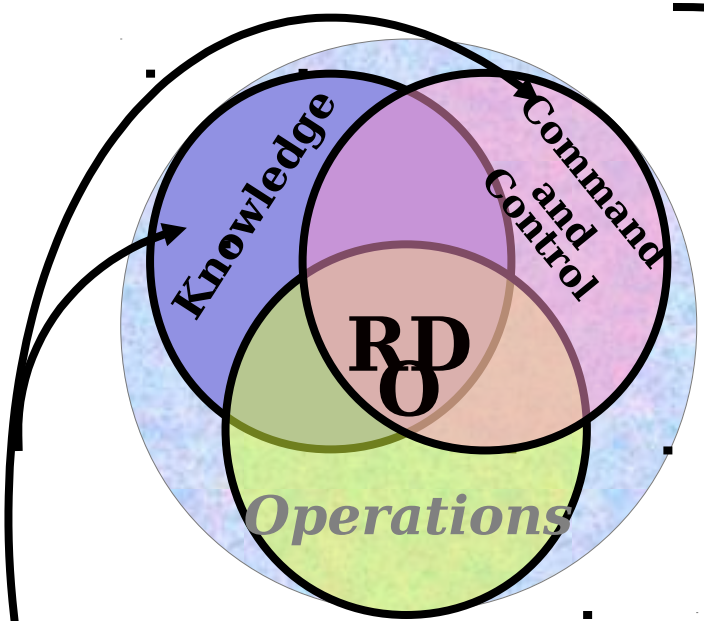
Concept Focus FY00-FY02

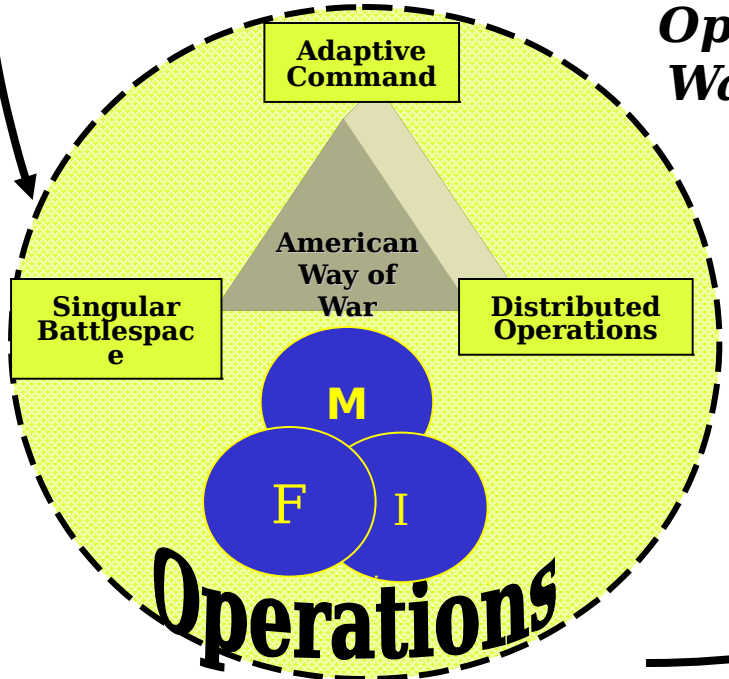
- Integrating Concept for Experimentation (RDO)
- Conduct joint operations without recapitalizing the force
- Emphasis on *Knowledge* and *Command and Control* issues

Concept Focus FY03-FY05

- Toward a Joint Warfighting Concept
- Examine the capabilities for future joint operations

Future of the RDO Concept





Joint Operational Warfighting

Joint Warfighting Concept

2015 +

RDO Elements (2.0

Joint Operational Warfighting

Introduction

Agenda

Joint Concept Development and Experimentation

- Introduction
  - The Environment
  - The Threat
  - The Paradigm
- The Concept
  - The Culture
  - The Cornerstones
  - Emergent Qualities
- Conclusion

The Environment

The Environment

Joint Concept Development and Experimentation

- The nature of war has not changed
- The conditions of war are always changing
  - Technology, geopolitics, cultural dynamics…
- Increasing diversity of challenges:
  - Growing trans-nationalism and extra-nationalism: tribal/ethnic/sectarian conflicts, terrorism, etc.
  - Increasing urbanization, globalization, networking
  - Proliferation of advanced technologies and WMD

The Environment

Joint Concept Development and Experimentation

- Illuminated battlespace
- Evolving challenges of sensor combat
- Increased lethality of weapons: accuracy, speed, range, and engagement intensity
- Paradox of “empty but crowded” battlespace
- Sanctuaries and “dark places”
- Tension between information/knowledge and complexity/uncertainty

The Threat

The Threat

Joint Concept Development and Experimentation

- "…Uncertain enemy and unpredictable attacks…"
- Unconventional (4th Gen.) warfare threat increases:
  - Guerilla
  - New Warrior Class: different rules…different values
  - Asymmetrical (avoidance of strengths)
  - Population and time
- Conventional threat remains:
  - Professional militaries
  - Force-on-force, attrition
- Emergent niche technologies
- Potential CBRNE weapons employment

COMPLEX & UNCERTAIN

The Paradigm

The Paradigm

Joint Concept Development and Experimentation

Analysis of …

Theory:
- Sun Tzu
- Clausewitz
- Jomini
- Douhet
- Mahan
- Newton

History:
- Napolean
- Moltke
- Grant
- Guderian

Practice:
- France 1940
- Inchon 1950
- Sinai

Led to Current Paradigm…

Elements of Operational Design:

-End state
-COG
-Force ratios
-Lines of Ops
-Deep/Close/Rear areas
-Decisive Pts
-Culminating Pts
-Operational reach
-Simult.& Sequent. Ops
-Linear & non-linear Ops
-Tempo

Ongoing Analysis of …

Theory:
- Information
- Systems
- Boyd
- Complexity/Chaos

History:
- Viet Nam
- Somalia
- Panama
- Desert Storm

Practice:
- Balkans
- Afghanistan
- Homeland Security
- Counter-Drug

Technology

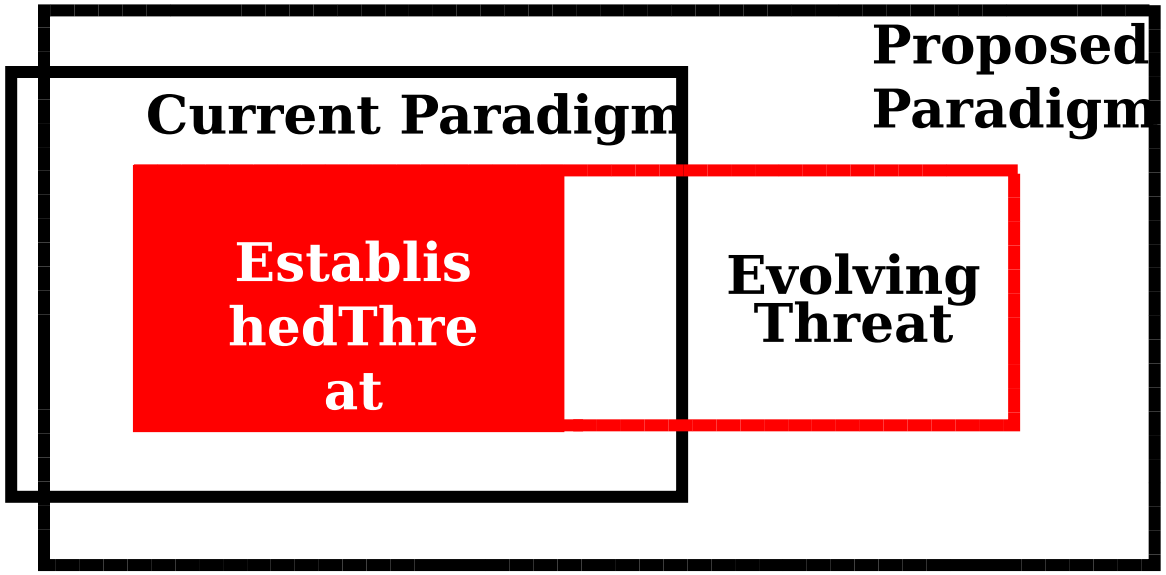
Leads to New Paradigm

?

The Paradigm

Joint Concept Development and Experimentation

The conditions of war, the battlespace, and the adversary's methods have changed…



like creatures in nature, we must adapt to the new environment if we are to continue to dominate…

The Concept

Joint Operational Warfighting

Joint Concept Development and Experimentation

Joint Operational Warfighting is a concept for how the future joint force will fight in the next decade.

Joint Operational Warfighting

Joint Concept Development and Experimentation

Joint Operational Warfighting is…

- Shaped by an appreciation of military theory, service concepts, complexity science, systems theory, and common sense.
- Framed by a new warfighting culture
- Applies a systemic approach to its component concepts of Singular Battlespace, Adaptive Command, and Distributed Operations
- Designed to achieve the emergent qualities of increased synergy, adaptability, and combat effectiveness

Joint Operational Warfighting

Joint Concept Development and Experimentation

Singular Battlespace

Distributed Operations

Adaptive Command

Warfighting Culture

Joint Concept Development and Experimentation

- **The term *Warfighting Culture* is used to connote the American way of war -- that uniquely American perspective from which we understand and prosecute war.**
- **Warfighting culture is a constantly evolving construct. It is influenced by American ideas, its peoples, history, politics, economy, civil culture, etc.**
- **Although its nature is philosophical and abstract, its influence is direct, providing the foundation on which our doctrinal models are built.**
- **Warfighting culture provides the animating force behind decision-making, education, doctrine, organization, training, and all other aspects of warfighting**

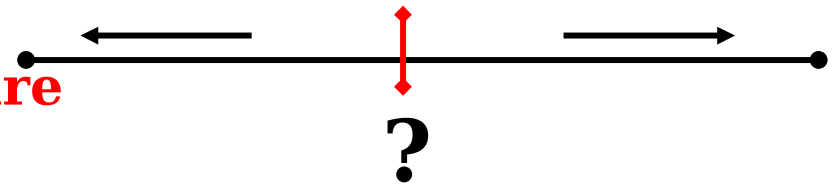
Warfighting Culture

Joint Concept Development and Experimentation

Traditional

- Mechanistic
- Reductionist
- Linear
- Contiguous
- Massed
- Patterned
- Effects-aware
- Methodical
- Military-Centric
- Confrontation
- Industrial
- Hierarchical
- Centralized
- Analytical

…a shift in bias along a sliding scale:



Proposed

- Complexity
- Systemic
- Non-linear
- Non-contiguous
- Distributed
- Unpredictable
- Effects-focused
- Opportunistic
- All elements of power
- Dislocation
- Information
- Non-hierarchical
- Decentralized
- Intuitive

The Cornerstones

Joint Operational Warfighting

Joint Concept Development and Experimentation

Singular Battlespace

Joint Concept Development and Experimentation

"Separate ground, sea, and air warfare is gone forever. If ever again we should be involved in war, we will fight it in all the elements, with all services, as one <u>single concentrated effort</u>."

- Dwight D. Eisenhower

Singular Battlespace

A concept for building and understanding the operational battlespace in the next decade

Characteristics:

- **Full breadth and depth of the battlespace**
- **Systems approach**
- **Comprehensive Connectivity**

Singular Battlespace

Joint Concept Development and Experimentation

Full breadth and depth of the battlespace

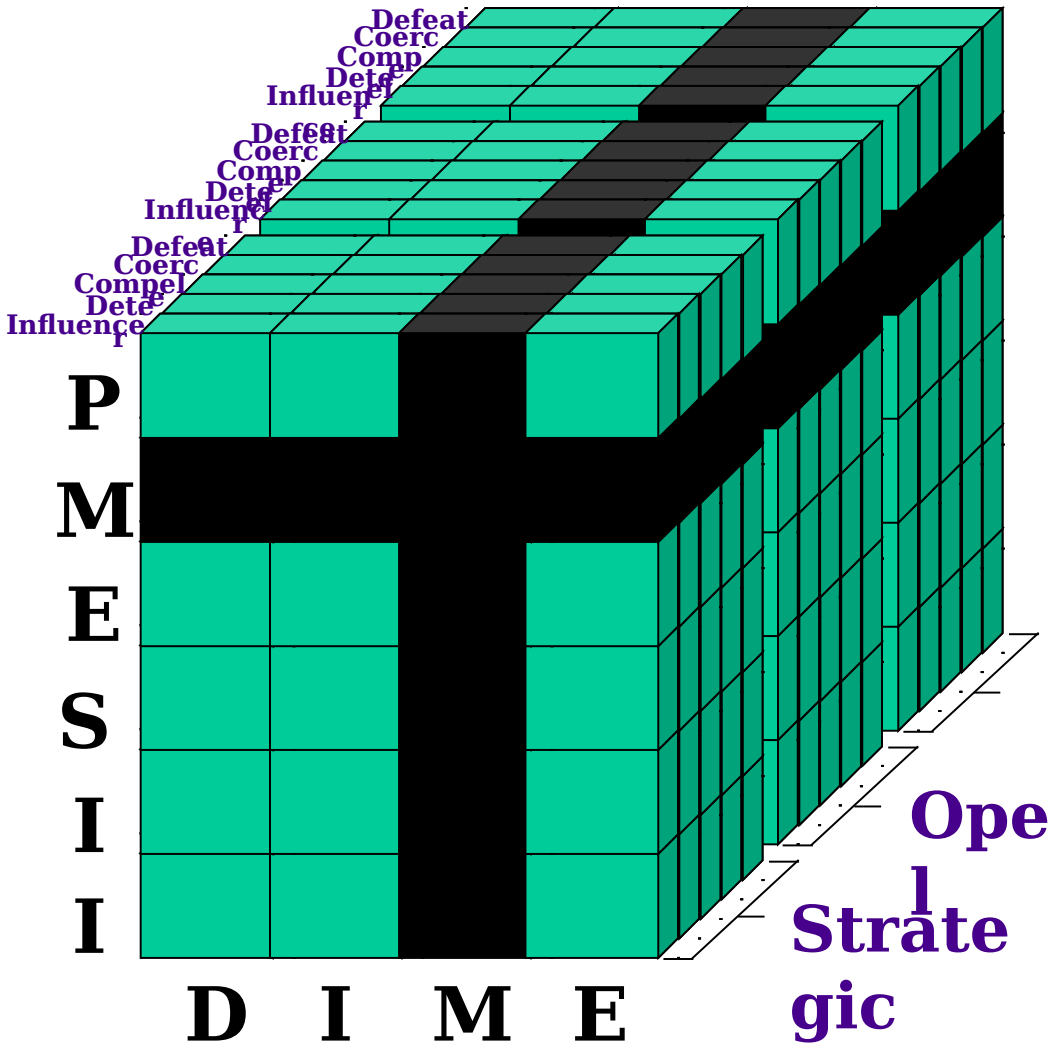
- Includes full breadth and depth of the Air, Land, Sea, Space, and Information domains
- Evolution from Deep Operations Theory, AirLand Battle, Forward from the Sea, Operational Maneuver from the Sea, and Global Engagement
- Technology is “compressing space and expanding time”
- The levels of war are merging -- Operational nodes
- The roles of the Joint Forces Commander and staff?

Singular Battlespace

Joint Concept Development and Experimentation

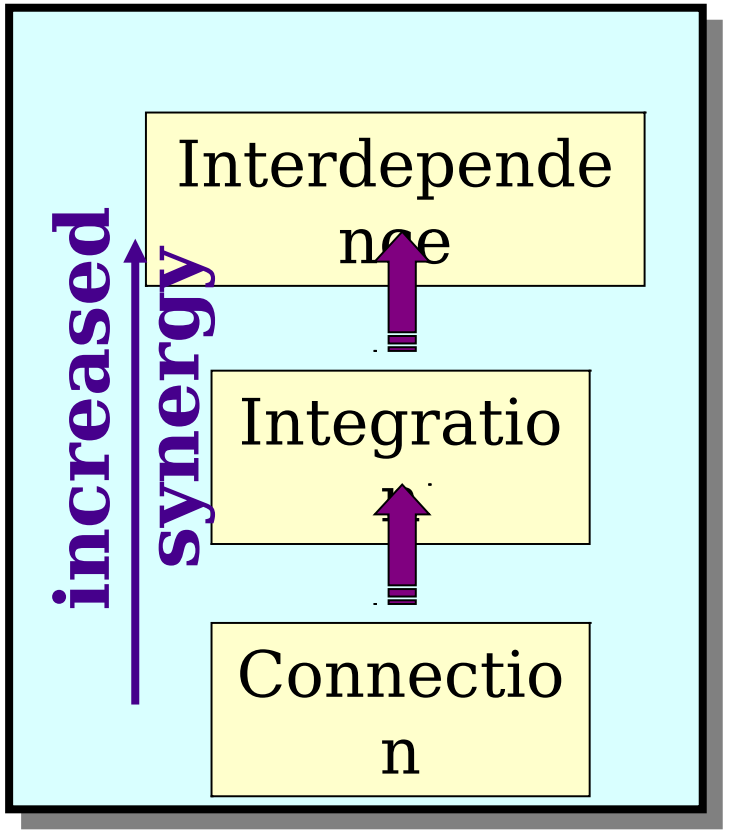
Systems Approach

A system of systems



Systems Approach

- Erasing or redrawing the systems' seams
- Acknowledges the indivisible character of joint capabilities…from parts of a machine to the wholeness of singularity
- Interdependence enables adaptability and addresses the complex battlespace
- The part is greater than a fraction of the whole
- Ongoing evolution toward recognizing and building interdependence



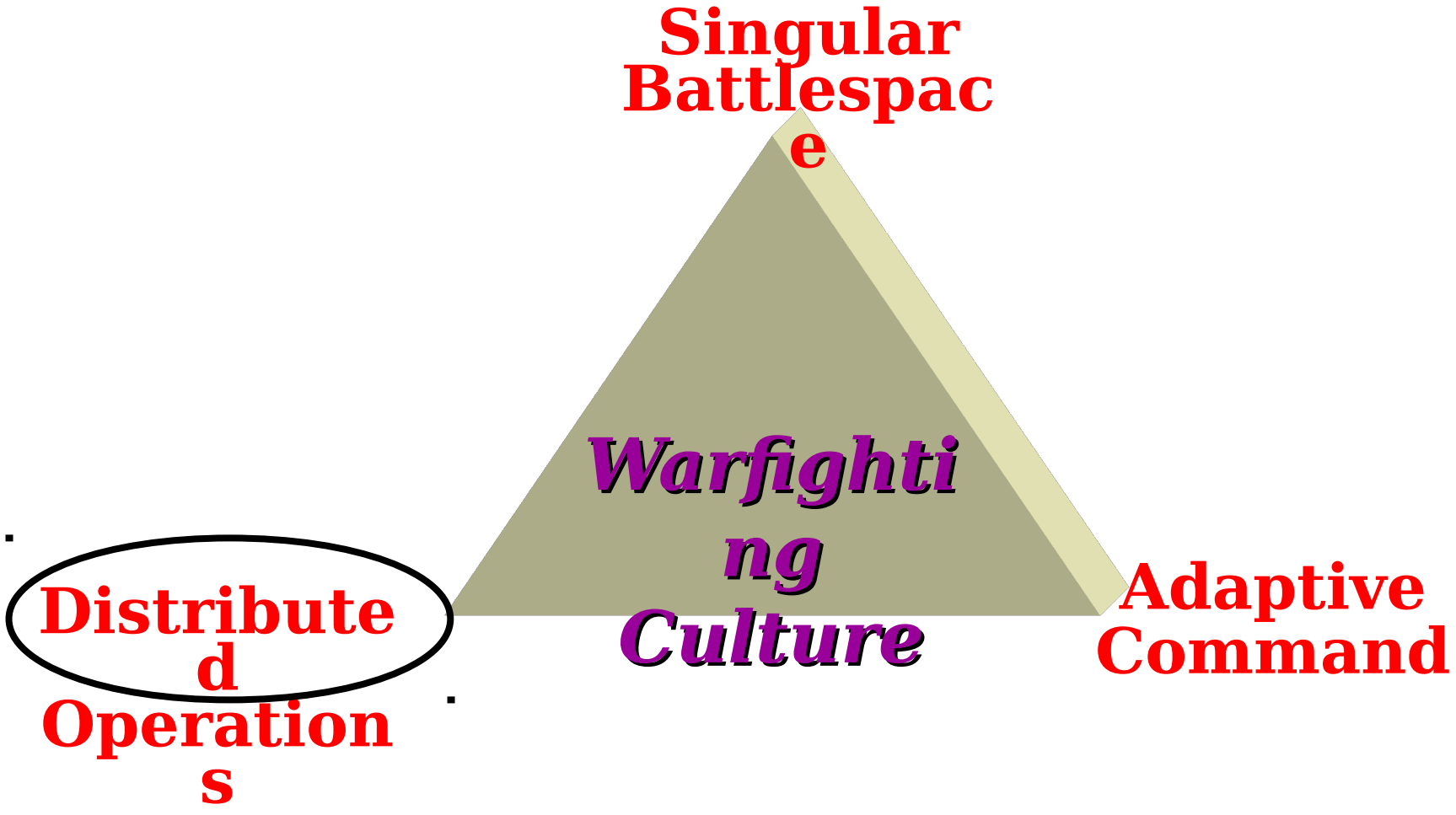
Comprehensive Connectivity

Comprehensive connectivity is the foundation:

- Electronic connectivity
- Culture/intellectual paradigm
- Shared awareness
- Doctrine
- Training/education
- Leadership
- Organization
- Adversary
- Et cetera.

Joint Operational Warfighting

Joint Concept Development and Experimentation



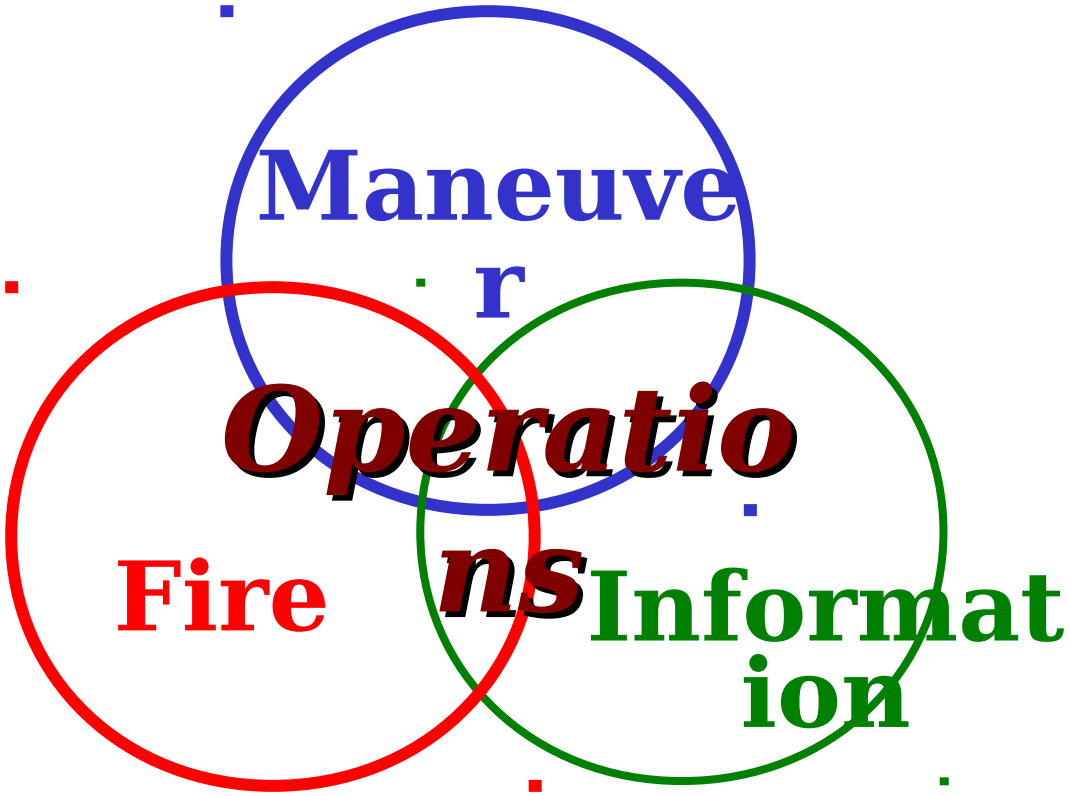
Distributed Operations

A concept for employing and leveraging all joint capabilities throughout the full breadth and depth of the operational battlespace.

Distributed Operations

Concept Development and Experimentation

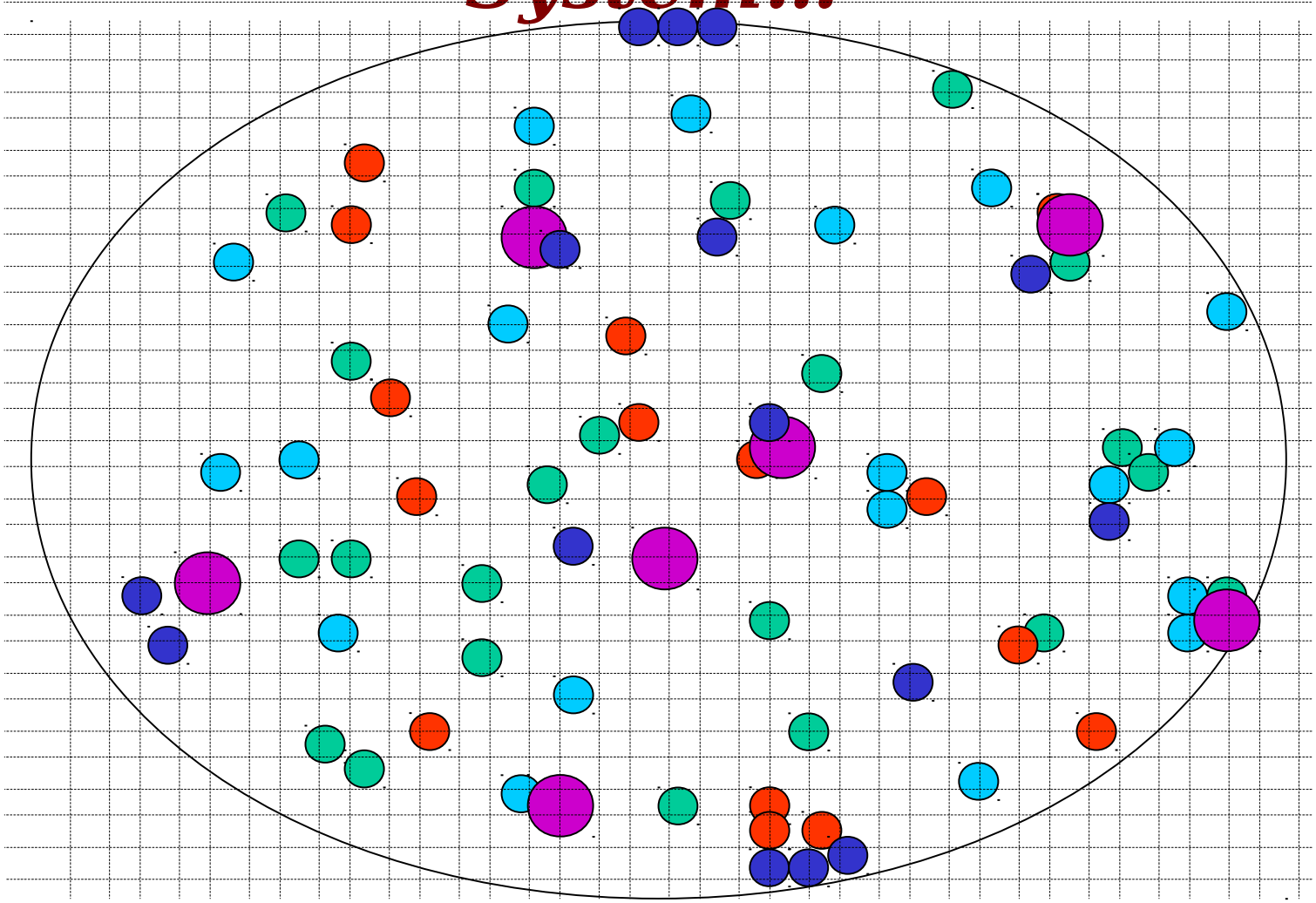
Generating Effects



Distributed Operations

Joint Concept Development and Experimentation

A Distributed System…



Distributed Operations

Joint Concept Development and Experimentation

Characteristics:

- Distributed & Dispersed
- Spatial
  - Systems approach
  - Operational nodes
  - Full operational battlespace
  - Force-in-being
- Temporal
  - Simultaneity
  - Tempo
  - Momentum
  - Speed
- Multi-dimensional & multi-directional
- Dislocation
- Unpredictability
- Increased Surface Area
- Autonomy
- Joint arms
- Agility
- Tailorability

Joint Operational Warfighting

Joint Concept Development and Experimentation

Adaptive Command

A concept for commanding forces within a complex and uncertain environment.

Adaptive Command

Joint Concept Development and Experimentation

Exploit Opportunities	Mitigate Challenges

Proliferation Of Decisio… M…

CDRs Intent (new boundaries)

Self-synchronization

Feedback

Effects Based

Trust

Shared Situational Understanding

Increased Connectivity

Decision Cycle

Training & PME

Collaboration

Emergent Qualities

Joint Operational Warfighting

Joint Concept Development and Experimentation

Distributed Operations

Adaptive Command

Conclusion

Conclusion

Joint Concept Development and Experimentation

Joint Operational Warfighting…

- is an articulation of first principles of a new paradigm
- is a systemic concept
- requires experimentation…

Questions?

Toward ...

Joint Warfighting Concept

2015 +

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